

WHAT IS CLAIMED IS:

1. A control system for a motor-generator, comprising a rotated-position detecting means for detecting a rotated position of a rotor included in a motor-generator which is connected to an engine in such a manner that the motor-generator can function as a three-phase magnet-type synchronous motor after starting of the engine, and a control unit for controlling a DC power produced by rectifying an AC power from a commercial power source based on an output from the rotated-position detecting means and supplying the DC power to each of three-phase coils included in said motor-generator, said motor-generator being capable of functioning as a brushless DC motor before starting of the engine,

wherein said rotated-position detecting means is arranged to detect an induced voltage in each of the three-phase coils included in the motor-generator and to detect a rotated position of the rotor based on said induced voltage.